AMERICAN FARMER.

RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICES CURRENT.

" O fortunatos nimium sua si bona norint
" Agricolas." . . . VIRG.

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AGRICULTURE.

Prince George, (Virg.) April 4th 1820.

SIR,—In obedience to a resolution of the delegation of the United Agricultural Societies of Virginia; I notify you of their request, that the contents of the Pamphlet which you will receive by this mail, may be published in your valuable paper. As you have already printed the memorial, our request is *now* limited to the " Address to the Public."

Respectfully yours, &c.

EDMUND RUFFIN,
Secretary to the Delegation.

J. S. SKINNER, Esq.

AN ADDRESS TO THE PUBLIC,

FROM THE DELEGATION OF THE

United Agricultural Societies

OF VIRGINIA.

In submitting to the consideration of our fellow-citizens, the following remarks on the arguments contained in the publications of the Manufacturers—we wish distinctly to be understood, as being hostile to no pursuits of industry, depending on their own merits. All such add their full proportion to the National Wealth and revenue, and have our most ardent wishes for their prosperity. To those only we are opposed which require for their success the support of protecting duties or prohibitions; because although the loss to the undertaker may be inevitable, without protecting duties, it is not the less certain, even with their aid; but devolves on the nation instead of the adventurer.

To refute every argument advanced in support of monopoly and prohibition—to shew the fallacy of the numerous assertions of their advocates—would, (however easy to perform,) be an unnecessary intrusion on the patience of the public. We shall however, state all their arguments that are at all calculated to make an impression on the public mind, and endeavour to prove (as far as negative propositions admit of proof) that all their propositions are completely untenable.

The first argument used for the encouragement of Manufactures by bounties, is *that there is in the United States a large amount of unemployed capital, as well as labour, both of which would find employment in Manufactures.*

There certainly can be but few if there exist even one country of the world, in which capital is superabundant, and on that account, lies unemployed and useless. The United States, so far from forming an exception, wants capital more than any other country, because in no one can it be so profitably invested: and no where (if the laws make property secure) can governments hold out to individuals stronger inducements to keep the full amount of their capitals employed than self-interest would dictate. If then self-interest be a competent inducement with every individual to keep his whole capital imployed, and as the only means of effecting that object must be either directly or indirectly by the employment of the labour of others, it necessarily follows, that the labour of every country must be precisely in proportion to the capital which can pay for it, and cannot in the smallest degree exceed that proportion.* An increase of the capital of any country, will have the immediate effect of equally increasing its productive labour; but merely a new direction of national industry, without an increase of national capital, although it changes the employment of many labourers, will not create a demand for one more than before. The establishment of manufactures by indirect bounties, instead of increasing the national capital, diminishes it to the full amount of the bounties paid; and consequently the whole number of labourers that could be employed, would be diminished in the same proportion.

In one view we are willing to admit that the statement is correct as far as it regards labour: But it does not appear that the manufacturers mean to hold out to the public as an advantage the employment of more labourers, by means of bounties or monopoly prices only; and if they do, it is leaving this part of the subject, and going upon the question of the general policy of bounties and protecting duties. The high price of labour in this country, fully proves the great demand for it, that now and always has existed. It is well known that the hire of a labourer in Europe will barely maintain him, on the coarsest food; here the labour of one or two days, will furnish an abundance for a week, still, thousands are idle, who prefer idleness to even those high wages, and we find it advantageous to employ a portion of our capital, in buying the products of the labour of the people of Europe and India, rather than give double or treble prices for the labour of those persons now idle at home. Legal restrictions can certainly subject us to the latter alternative; and no one ever doubted that protecting duties sufficiently high, would command to any extent either capital or labour, for such pursuits as they were designed to encourage.

2d. " Though it were true, that the immediate and certain effects of regulations controlling the competition of foreign with domestic fabrics, was an increase of price, it is universally true, that the contrary is the ultimate effect with every *successful manufacture.* When a domestic manufacture has attained to perfection, and has engaged in the prosecution of it a competent number of persons, it invariably becomes cheaper. Being free from the heavy charges which attend the importation of foreign commodities, it can be afforded cheaper, and accordingly seldom or never fails to be sold cheaper, in *process of time,* than was the foreign articles for which it is a substitute. The internal competition which takes place soon does away every thing like monopoly, and by degrees, reduces the price of the article to the minimum of a reasonable profit."

These are the words of Alexander Hamilton, which we have quoted in full, because, they have frequently been used by the advocates of monopoly, and are considered by them as their most able support—— Was this question to be decided by quoting the opinions of great men, our cause would not be found wanting. Thomas Jefferson, who is at least, equal to the former, in profound knowledge, patriotism, and devotion to the cause of liberty, says in a message to Congress, " Agriculture, Manufactures, Commerce, and Navigation, the four pillars of our prosperity are then most thriving when left to individual enterprise." But we disclaim the aid of great names and leave the question to be decided by its own merit. Experience proves, that the prices of forced manufactures will be fixed and continued by the amount of the duty imposed for their protection.

It amounts to nothing, when we are told that protecting duties would not increase the price of such articles as may be profitably manufactured without bounties, and to such only can the word " *successful*" apply. It is absurd to apply it as the manufacturers do, to pursuits which are created, and can exist only, by bounties or protecting duties. Bounties sufficiently high can produce pine apples and sugar in any quantities in New England, or keep a hundred sail of whale ships on Lake Ontario: and these new directions of national industry and capital, would be completely " *successful,*" according to the definition of the manufacturers.

All the remaining part of the quotation is perfectly correct, with the saving words " *in process of time.*" Our manufactures without bounties, will no doubt, in *process of time,* undersell all others, whose commodities will be subject to the expense of transportation across the Atlantic. That time will arrive whenever America is fully populated from the Atlantic to the Pacific Ocean, from the Lake of the Woods, to the Isthmus of Darien. When from excess of population, and its consequent train of miseries, labourers will joyfully work for prices, that will barely furnish them bread, then will manufactures certainly succeed without bounties or any kind of legislative interference; and to secure this inevitable result, it is perfectly unnecessary to anticipate it, by giving bounties for 500 years, or even for one year.

That so profound a statesman as Gen. Hamilton should have supported this opinion, is easily explained. His leading political object, was to strengthen the Federal Government. He well knew that object could not be more effectually obtained, than by the creation of artificial interests, in whose hands, the laws would cause the wealth and power of the people rapidly to accumulate, and who would always support with all their influence the government that gave them existence. For this purpose, he supported the protecting duty system, and the creation of a monied interest, by the establishment of the funding system and the Book of the United States.

But profound as were Gen. Hamilton's views on political subjects generally, and speciously as he has exhibited them, an appeal to facts will prove that we have not realized from the protecting duty system, the benefits which he predicted. For many years the duties on saddles, hats, shoes, boots, and ready made clothing, have amounted to a prohibition on their importation. Have the prices yet fallen below those of the former importations, which included the payment of a considerable revenue to government, the amount of which is since entirely lost? The manufacturers themselves are not so hardy, as to answer in the affirmative. It is well known that so far from those articles becoming cheaper, by the increased production, the original monopoly prices have been increased, and with regard to some of them, to an enormous amount, by combinations among the manufacturers. It is not so generally known, what we fear no contradiction in asserting, that were duties instead of acting as prohibitions, reduced to that amount, which would yield the greatest possible revenue, there would be on the above-mentioned articles alone, an augmentation of the receipts in the Treasury, and saving of expense to the people, of at least $3,000,000 annually. The whole catalogue of expenses to the people and loss to the Treasury, annually produced, by the tariff of 1816 and previous protecting duties, can scarcely be less in amount than half the present nett revenue of the federal government: and yet the manufacturers pour out loud and unmeasured reproaches on Congress and people for having neglected, nay, completely sacrificed their interest.

3d. That the prosperity and wealth of Great Britain which for centuries has afforded the fullest protection to manufactures, demonstrate the wisdom of the policy.

That the prosperity of England has been produced by monopolies, prohibitions and restrictions on industry, is one of those assertions which if it proves any

* Wealth of Nations. Book 4th Chap. 2d.

thing, would prove too much. The same effect has at different times been attributed to very different causes, and the argument is not more *convenient* than it is fallacious. The imitation of England in banking, funding, and protecting duties, has been strongly recommended to the people of the United States, because *each*, as it suited the purposes of its advocates, has been considered the cause of the wealth and power of that country. Similar arguments would be equally strong, in recommending Monarchy, Aristocracy, and an established Church, because England and every other portion of Europe, possessing wealth and power, have obtained them under that form of government.

It is impossible to say what the situation of England would have been, had not the industry and capital of the people been cramped by restrictions, or directed to unprofitable pursuits by bounties: but reason, and every principle of political economy, enforce the opinion, that other circumstances enabled that country to flourish, in spite of its policy, and not by its aid. England pursued this policy in common with all the other European States, and even fell short of some of them in rigour; but (excepting Holland,) she stood alone in possessing a considerable portion of freedom, and in security from invasion from her insular position and naval power. The love of gain is a motive so strong, so universal, that man requires no other encouragement to industry, than the secure and quiet possession of the fruits of his labour. That blessing has been enjoyed for centuries, by the people of England, (although oppressed by Church and State, and plundered by artificial paper and manufacturing interests) in a superior degree, to those of any other part of the old world. These are the causes of the prosperity of England—of her superiority to Spain, Portugal, and Turkey. The citizens of the United States have hitherto been pre-eminent in this respect, and their prosperity has surpassed that of England or any other country. This cannot continue unabated; when the cause is weakened or destroyed, and for the support of artificial, monied, and manufacturing interests, the great mass of our population must necessarily be deprived of most of the fruits of their labour, the only stimulous to industry, and cause of national wealth. We are aware that the navy of England, to which perhaps, is due her political existence, has been in a great measure formed and supported by bounties: and so far from our objecting to protecting duties or bounties, imposed for the *national* defence and benefit, none are more willing to approve this policy of our government, in the manufacture of arms and munitions of war, naval equipments, regulations of the coasting trade, &c.

Objectionable however as is the English system, it is much less so than that, which our manufacturers aim to establish. The agricultural interest of England *receives*, as well as pays bounties, and by affording support and protection to every pursuit of industry as it is required, that monstrous and complicated system of monopoly, may eventually become equivalent to perfect freedom to industry and trade: and its restrictions and prohibitions, will then produce neither benefit nor injury, except in finding employment and support for innumerable taxgatherers and smugglers. In this country, from the peculiar nature of our situation, no bounties can possibly be received by the Agricultural interest, but by it, the bounties to every other interest must necessarily be paid.

But admitting benefits to attend the protection of manufacturers in Great Britain, still, it is impossible to place our own on the same footing. The laws there give the manufacturers the monopoly of the labour of their workmen; and the exportation of wool, (one of the most considerable products of Agriculture, and the material of their most valuable manufacture,) is prohibited, under the severest penalties.—The effects of these regulations, are to depress the wages of labour, and to cause wool to sell at only half the price that it commands here, and wherever no such monopoly exists. The whole amount of difference between the real value, and the monopoly price of both labour and the raw material, is a *bounty* paid by England to foreign nations, to induce them to buy her Manufactures. By means of this policy, as absurd as it is unjust, of robbing the labourer and farmer for the benefit of the manufacturer, the coarsest English woollens can be imported and sold here for a price very little, if at all exceeding the value of the raw material. Thus, that we may be induced to buy their wool at only a fair price, they manufacture it for nothing. The rights of the citizens of the United States, and the constitutional prohibition of export duties, prevent such regulations here. The manufacturers may obtain a full and complete monopoly against their fellow citizens, but it is not possible for them to compete with others in foreign markets.

4th. The United States cannot be really independent of foreign nations, as long as we are supplied by them with manufactures, especially as in a maritime war all commercial intercourse would be cut off.

It is a law of nature, which no human regulations can possibly counteract, that every individual shall be dependent on others, for the means of obtaining happiness, or wealth, and even of preserving existence. A similar mutual dependence, but in a less degree, exists between different nations, and from the ability of supplying each other's wants, or from this mutual *dependence*, as the manufacturers prefer calling it, result all the beneficial effects of foreign commerce. We are willing to believe that the observations of the manufacturers were not intended to apply to this natural dependence, which is so general and salutary: but they are inapplicable in any other way, and they could have had no other view, than the excitement of prejudice, by thus frequently using a word which is so justly odious to the people of the United States.

The commodities of the country can never be sold to another at monopoly prices, but must always be reduced by general competition, to the lowest price, at which they can be afforded. The power of governments, in enforcing monopolies, extends no farther than against their own subjects, and the foreign manufactures, purchased by us, are never above the fair price produced by general competition, and (as in English woollens for example) frequently much lower.

In time of war, much inconvenience and injury are sustained by cutting off foreign supplies and consequent enhancement of prices. If this evil is not in some measure inseparable from a state of war, the manufacturing system does not offer the least relief. Prices would in that case be less variable, because the amount of protecting duty would fix the *monopoly* price: the diminution in time of war, if any, would fall very far short of the increased price in the time of peace. We have already admitted the propriety of providing at home, munitions of war, &c. whatever may be the cost, and it would be ridiculous to speak of our suffering for mere luxuries. Whatever may have been the case in particular sections of the country, whence proceed such complaints of the manufacturers, we can say with truth and pride, that during the late war with Great Britain, the taste for luxury, for fashion, and display, in the Southern States, gave way before the nobler feelings of public spirit, and love of country; and we consider the supposition, that such trivial difficulties, could ever lessen the ardour of the people of the United States, in the defence of their country's rights or honour, as a most unjust aspersion on their patriotism.

The necessaries of life alone then can be considered, in this view of the question, even was it true that we should be better and more cheaply supplied, by protecting their manufactures. Salt, the high price of which caused as much inconvenience as any other article, the manufacturers do not mention, notwithstanding their solicitude for the public good: a bounty for its production would be one of the very few, which they would assist in *paying*, instead of receiving. As to coarse clothing, blankets, shoes, &c. we could not possibly be in want of them, if the country produced a sufficiency of wool and leather. As this however is not the case, it seems, that if it is necessary that the home production should be encouraged by bounties, they should be given for the *materials* and not for their manufacture. If then the advocates of monopoly avow their real object—if it is to make us independent of foreign nations, in our supply of the necessaries of life, and not to foster a privileged order—it will become them to support the only means of effecting it. Bounties can do any thing, except increase a nation's wealth; and sufficient encouragement to the farmer, to produce wool and leather, will make this (what nature has said it should not be) a grazing country.

All that we have said on this subject, is on the supposition of our means of naval defence, and consequently of commercial intercourse, not exceeding those of the late war; but we have more confidence in the rapidly increasing strength of our country, than to believe, that we shall ever be subject to the same inconvenience in future. Though opposed to great national expenditures of every kind, we would prefer increasing our naval force tenfold, to the establishment of manufactures of every kind by bounties. Whatever may be the expense of the former, it would at least increase our strength, and command an open foreign trade; it is doubtful whether an annual sacrifice of fifty millions of dollars would effect the latter, and it could only cause national poverty and weakness.

5th. The protection and establishment of manufactures, is not a matter of choice but necessity: Europe will not long want the least portion of our products; and without a previous establishment of manufactures, sufficient to supply the whole of our consumption, (which will also be a market for the whole surplus produce of agriculture,) this country will soon be reduced to the dreadful situation of having nothing to sell, while it has every thing to buy.

The establishment of manufactures is said to be absolutely necessary to guard against the ruinous balance of trade, which will exist against this country. Admitting (for a moment) that the time will arrive when there will be no foreign demand for our productions, and exportation cease entirely, an examination of the course, which self-interest and necessity, would point out to every private individual, will not only show what alterations would necessarily be resorted to in the direction of natural industry, but will demonstrate the uselessness of their boasted remedy, and the absurdity of the opinion respecting the *then* unfavourable balance of trade.

When there is no demand for the surplus products of agriculture, and their price will not defray the expense of cultivation, the certain consequence must be, an immediate and considerable fall in the wages of labour. This will enable the farmer to employ labour in pursuits, which could not otherwise be afforded, on a fair calculation of profit. Thus directed by interest alone, every farmer would now manufacture the necessary clothing for his family, which before he found it cheaper to buy, with a portion of the profits of his capital, more advantageously employed. But, by the division of labour, and use of the machinery, manufactures of all kinds, can always be carried on much cheaper on a large scale, than in a private family; therefore such a state of things would of course effect the complete establishment of all necessary manufactures, *naturally* and *profitably*, without the aid of legal protection, bounty restriction, or prohibition. The Manufacturers would be in a better situation, than as an *artificial* interest, they can possibly be placed. Instead of being limited to the supply of the home market, and having even there to contend with the host of smugglers, which this system must create,—they would by the *natural* establishment of manufactures, be able to compete in foreign markets with all others, who were not supported by direct bounties.

As the certain and inevitable consequence of the "dreadful situation of having nothing to sell, and every thing to buy," would be the complete establishment of manufactures, its occurrence, instead of being deplored, ought to be highly desirable to those who consider that result so essential to this country. But that situation would be dreadful indeed, to the people in general, from the great reduction in the prices of produce and labour. This state of things would however, be no more injurious, than the legal establishment of manufactures, and we ask whether it is wise, or even sane, that to avoid an evil, which is remote, improbable, and transient in its nature, we should voluntarily fix it upon ourselves now, and perhaps for ever.

The prophecy of the ruin of our country, which is to be caused by buying more than we sell, is founded on the erroneous opinion that nations are enriched or impoverished by commerce only, as the balance of trade is advantageous or otherwise. The absurdity of this theory has been so clearly proved by the "great commercial Philosopher" Adam Smith, that we believe no political economist has since advocated the necessity of regulating the balance of trade by law. The manufacturers, however, earnestly recommend it to Congress, because such is the policy of all European governments. Their efforts have indeed, been most fruitlessly employed, to effect that, which no human regulations can either accomplish, or prevent; and the only end which has ever been secured by such laws, is injury and loss to the country, in whose favour they were intended to operate. Trade will invariably find its own level, and temporary inequalities are certain to produce their own cure. It is not *possible* for us to buy regularly, more than we sell, as we should have no means of paying the balance. But it is practicable for a short time, and we are now paying the cost of such a course. After the late war, the merchants of this country, in expectation of immense profits, imported foreign goods to an amount far exceeding our exports in value. The market being overstocked, foreign goods fell greatly in price: the returns were not sufficient to pay the debts incurred to make the importations, and severe losses, or bankruptcy, attended a large proportion of the mercantile interest. The manufacturers would induce the opinion, that this overtrading will continue, but they are contradicted by both reason and experience. No more goods will be imported until they are in demand, and foreigners will not continue to give credit to American Merchants, until the debts now due are paid. Mean while, our exports are rapidly paying off the balance yet remaining, and the losses sustained by thus overtrading, will be a sufficient security against the early recurrence of the evil.

But though a general and permanent balance of trade cannot exist against any country, particular balances may be, and are caused by certain branches of foreign commerce. This we admit, if the rule is correct, which fixes the profit or loss of any branch of trade by the specie which is received or paid in its prosecution. The India trade is said to be injurious to this country, and that with South America highly advantageous, because, the first continually takes away specie, and the last supplies it. Yet if those trades are equally advantageous to their undertakers, they are equally so to the nation. We pay for all India goods with specie—that is, with the production of South America. If we pay for the specie with India goods, our trade with both countries is precisely the same, consisting in exchanging the commodities of the one, for those of the other. Without considering that the scarcity of specie is the inevitable consequence of paper emissions, the India trade has been charged with causing that evil. It is the *means*, but not the *cause:* it is evident that the exportation of specie alone, to India, can no more deprive us of as much as our circulation requires, than the exportation of Tea, Spices, Silks, &c. to South America, can prevent our being fully supplied with those articles. Neither Specie, nor Tea, Spices, &c. are the products of our country, yet commerce will never fail to provide the first as well as the last, in any quantity that we demand, or are able to purchase.*

The agricultural interest is promised a home market for all its surplus products, as an ample remunera tion for its sacrifices in establishing manufactures by bounties.

The regulation of the balance of trade by law is a policy to which the nations of Europe are, and always have been so devoted, as to render it in the highest degree improbable that they would buy from any country which refused to buy from them. We do not concur with the manufacturers in applauding this course, we only adduce it as a consequence which cannot be controverted. Whatever then, may be the value of this new home market, it would infallibly cause the entire loss of all others; and the manufacturers by having the monopoly of furnishing us with their commodities, would in consequence, obtain the monopoly of being the only purchasers of ours. The reduction in price of the products of agriculture, would be proportioned, to the excess of the supply, beyond the wants of the manufacturers. That there would be no such excess, is an assertion that scarcely deserves an answer. As many labourers as could supply us with manufactures of every description, it is evident could consume but a small portion of our surplus provisions. The *home* demand for cotton, would be greatly increased, but the *general* consumption and demand throughout the world, would not be at all augmented, nor of course would the price. We have already remarked, that our manufacturers cannot complete with others in foreign markets; and the whole consumption of the United States, of cotton goods, would not require one half of the raw material now made in this country. The monopoly of wool in England, for which there is an unlimited demand, has reduced its price 50 per cent: Therefore, it is to be expected, that the monopoly of cotton, for which there will be a very limited demand, will effect a still greater reduction of value. The home market for Tobacco, the great staple of Virginia they do not particularly mention. Their whole consumption of this article would probably not exceed a one fiftieth part of that which this system would destroy.

But conclusive as are these remarks, they are unnecessary for the support of our cause. We might even admit that the prices of agricultural products would be increased, and that the home demand would be equal to the supply. In this case every cent received from the manufacturers in *price*, by the farmers, would be only a part of what they had before gratuitously given away in *bounties*. We learn from the statements of the manufacturers, that their business is unprofitable, and in some cases ruinous, with the existing protecting duties, and it is certain that without protection, their sales would not meet their expenditures, by at least 20 or 25 per cent. on an average. It necessarily follows, that their whole means of purchasing would be derived, not from the actual profit, (of which there is none) but from the bounties, which the laws will enable them to draw from the people.

Let not our abhorence of monopoly and exclusive privileges be mistaken for hostility to the labouring manufacturer: Our opposition to the system is not more in favour of our own interests, than it is to the future comfort and happiness of those who will be its bondsmen.—High wages will at first be given to engage their service, but by the operation of the system the labourers will hereafter, as in every other country, become miserable dependents on the master manufacturers. One of the ostensible benefits of manufacturers, is, that children of 5 or 6 years of age may be employed, and earn something: This temptation is too strong to be resisted by poor parents. Debarred from necessary exercise and recreation, children are at that tender age, confined to the pestilential atmosphere of a large manufactory, and associated with hundreds of wretches of both sexes, who have been brought up in the same manner. What effects can proceed from such causes, but infirmity of body, degradation of mind, and corruption of morals. For those who have once fully engaged in such pursuits, there is no retreat; they are soon rendered unfit for any other employment, and they must of necessity entail on their children, the same life with all its miseries and vices.

It is unascertained how many millions of dollars will be necessary, or whether the whole nett profits of agriculture will be sufficient to completely establish the manufacturing system by bounties: but the effects of that establishment are not on that account the less evident. As the payment of nearly the whole amount of bounty, will fall on the farmers, the encouragement of manufactures will be an equal discouragement of agriculture, by taking away its already scant and hardly earned profits. Duties on importations will yield nothing, as their object will be prohibition and not revenue. The present expenses of their collection, will not however diminish, but on the contrary must be increased, to guard against smuggling. Direct taxation must supply the wants of government, to which the manufacturers cannot possibly contribute, as a tax on them would be merely a reduction of bounty. Foreign commerce must be destroyed, and all hopes of naval power necessarily abandoned. All important are the results of the monopoly system, they are so obvious that we leave them without further comment.

There are still other objections to this policy, which if our constituted and natural rights are dear to us, should outweigh all others, arising from pecuniary considerations.

We submit to the candour and judgment of our readers, the inquiry, whether it is not a violation of the spirit of the constitution, to impose taxes on some states, for the benefit of others. The extreme caution and jealousy expressed by the states in vesting the federal government with the power of taxation, and their requiring that direct taxes, should be apportioned according to representation, plainly shew that they never would have consented to any constitution, which allowed nearly the whole revenue to be drawn from the agricultural states, while others would receive in bounties an amount far exceeding their contributions.

That conferring exclusive privileges on persons or orders of men, having interests separate from or opposed to those of the people, is destructive of their rights, of every thing like freedom —*We* are told by the warning voices of the sages and patriots of the revolution.—Their words are sustained by reason, and confirmed by experience. Factious interests of every kind, are necessarily opposed to the interests of the people, as every step of the former in advancing to wealth and power, is on the property and rights of the latter. Factious interests having been created by government, and their existence even being held at its will, they will naturally, whatever their wealth and power may arrive to, always be completely subservient to the government from which they hold their wealth, their power, their existence. They will offer the ready and effectual means of making the government independent of the people, and however free in form, despotic in reality. Was there no other reason than this why they should not be established—however highly we estimate our government—notwithstanding our confidence in the wisdom and patriotism of those who administered it—we should dread those powers, unknown to the constitution, and every principle of republicanism dictates, that it is incompatible with the safety of the people, that such power should be trusted in the hands of any persons, subject to human frailty.

We ask of our fellow-citizens, a deliberate investigation of this important subject, in which, (in whatever aspect it is viewed,) they are so vitally interested—well assured as we are, that nothing more is requisite, to a general conviction, that freedom to industry, will most effectually promote the interests of our country; and that monopolies and exclusive privileges, are alike destructive of our wealth, prosperity, and freedom.

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* Wealth of Nations, Book IV. Chap. 3.

No. VII.

OF A SERIES OF

Agricultural Essays,

Communicated by Geo. W. Jeffreys, Esq. of North Carolina, for publication in the American Farmer.

Aldie, March 1st, 1819.

DEAR SIR.—In fulfilment of the promise made you some time ago, I embrace, the first leisure moment to answer your anxious inquiries on the subject of Loudoun Husbandry, &c.; and in doing so, I shall confine myself entirely to the practice, without attempting to reason from effects to causes: for he who en-

deavors to recommend to the farmer's practice, a method of cultivation, founded only upon theory, though supported by the most plausible deductions, will be much more likely to lead him into error, than the man who by the observation of what has happened to himself and others, from one uniform method of practice, ventures to pronounce that the like will happen to all; if all in like circumstances, will be persuaded to pursue the same course. I will endeavour to answer your queries in the order you have submitted them.

Query, 1st. On what soils does plaster succeed best?

Answer. It is believed, that a hilly, dry, gravelly or loamy soil, that will sink the water quick in winter, to be much the best. I have seen great effects from plaster, when the land was moderately undulatory, and even level, when raised into beds with water furrows, eight or nine feet apart.—Cold, flat, black-jack land is seldom favourable to it.

Q. 2. What kind of crops does it benefit most?

A. I esteem it most efficacious on tobacco and clover, though its effects are great on all kinds of grass, grain and plants.

Q. 3. When is the time, and how is the plaster applied?

A. It is almost the universal practice with the Loudoun farmers to roll all kind of seeds in plaster, even potatoes cut and plastered produce more abundantly. I soak my seed wheat for twenty-four hours in strong brine, and after draining it, roll it in plaster, at the rate of a peck to a bushel of wheat; as soon as the wheat branches in the fall, I strew a bushel of plaster to the acre; and in the spring immediately after sowing my clover seed, I strew an equal quantity of rotted or leached ashes, and plaster to the acre, say a half bushels of each. I soak my seed corn for twenty-four hours in strong manure water, and when dropped in the hill. throw the half of a table spoonful of dry plaster on the corn before it is covered; the usual practice is to roll the corn in plaster before planting, and to drop the plaster on the young plant, after the first hoeing, or to strew it broad cast over the whole field. I greatly approve of *fall plastering of wheat*; and am confident in my first experiment, I more than quadrupled my crop from a field of twenty acres.

Q. 4. When is the best time of applying it to clover and other grasses?

A. It is best to commence early in the spring, and as plaster is of a capricious nature, its application in small quantities, say a half bushel or less to the acre, and frequent repetitions is most efficacious.

Q. 5. Is it a current opinion in Loudoun, that there is any thing peculiar to the soil of that county, which favours the effects of plaster?

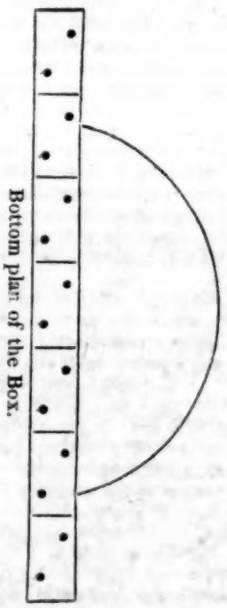
A. It is not; as it is a well known fact, that the effects of plaster are equally great in neighbouring counties. It is believed, that the renovation of the soil by the application of plaster, has been more rapid between the Cotocton and Blue Ridge Mountain, than any other part of this county. This embraces a country from twelve to fifteen miles wide, and about thirty miles in length.

Q. 6. When is the time for sowing clover seed?

A. Our farmers are governed much by the weather in sowing their clover seed, some sow in the fall; but most of them in the spring, upon wheat, rye, or oats. They have their favourite months; many of them sowing in all three of the months of February, March and April; some prefer sowing the seed when the ground is covered with snow, as it can be seen, whether the seed is strewed evenly.

Q. 7. What is the manner of sowing clover seed?

A. The most of our farmers sow the seed broad cast, as they do turnip or any other kind of small seed. I have seen a box used for sowing clover seed which answers extremely well.—It was invented by Mr. Bordley of Maryland, and consists of a box seven feet long, five inches wide and three inches deep, made of light half inch boards. The box is divided into seven parts, each division having two holes bored through the bottom, half an inch in diameter, and placed diagonally. Square pieces of strong writing paper are pasted over the holes, on the inside of the box. A hole is burnt with a coarse knitting needle through each paper; at about a third of the distance from each end of the box were fastened strong leather straps, by which the box was held, and a little agitated in carrying before the seedsman walking along the lands.



The Pennsylvania Farmers sow in the proportion of a bushel of clover seed to eight acres of land; our proportion is a bushel to ten or twelve acres, when it is intended for hay or seed; when for pasture a bushel to twenty acres.

Q. 9. What are the modes practised in Loudoun for gathering and cleaning clover seed?

A. The most common practice is, to cut the clover with a scythe; and as soon as it is mown, to rake it into small heaps, and expose it in the field for several weeks, to promote the decay of the husk; these heaps are turned during wet weather. When the husks are sufficiently rotten, which may be ascertained by rubbing the heads between the hands; they are housed and threshed or trod out by horses, during the cold dry weather in winter. It is then blown gently through a wheat fan to separate the pug or chaff from the seed. The seed and chaff are sown separately; but as a large proportion of the seed will always remain in the chaff, the field sown with the chaff is generally thickest set with clover. Some of our farmers make use of a machine, invented in New York, which is very simple in its construction. The machine is drawn by one horse, and is guided by a man or boy; it consists of an open box, about four feet square at the bottom, and about three in height on the two sides and back part, the forepart is open, and has fingers fixed to it either of hickory or steel, like a comb, about thirteen inches long, and so near as to break off the heads from the clover stalks between them, which are thrown back into the box as the horse advances. The box is fixed on an axle-tree, supported by two small wheels, two feet in diameter; two handles are fixed to the hinder part, by means of which the driver, while he manages the horse, raises or lowers the machine so as to take off all the heads of the clover.

[*See Vol.* I. *No.* 32, *page* 253, *for cut.*]

It is the second crop of clover that is saved for seed; that is of the same year; and when saved for seed, the heads should be quite brown or dead ripe.

Q. 9. What is the mode of curing clover hay?

A. When the half or more of the clover heads are turned from red to brown, and on the decay, it is the right time to mow it. Some make clover hay, by following the mowers, and spreading the swarths as soon as the dew is off, and making it up into cocks before night; some make it into cocks immediately after the mowers. It is a hay that requires great attention in curing, as the heads and leaves will bear little stirring without crumbling; it is therefore best to rake it after the dew falls in the evening.—The hay is put into the stack or barn the day after it is mown, and to secure it from becoming over heated or mildewed, some sprinkle salt alternately between each layer of hay, which assimulating with the juices of the hay, prevents too great a fermentation; some put a layer of straw between load and load of it; the straw contracts so much of its moisture, that the cattle eat of it freely. Where straw or salt are not used, it is usual to make a funnel in the centre of the stack to admit the air. This may be simply done, by placing or leaning five or six rails against a centre pole to stack the hay around.

Q. 10. Is clover much used for raising hogs?

A. It is, and our farmers are making it a profitable business. The hogs are turned in, when the clover is in blossom, and thrive exceedingly on it. They graze without attempting to root. The average quantity of corn allowed in former times to make a hog good bacon, was two barrels; since the introduction of clover, a barrel and sometimes less is found sufficient.

Q. 11. Is deep ploughing much practised?

A. It is, and has done as much, in my opinion, to improve the soil of Loudoun, as the clover husbandry, and plaster. We seldom use less than three, frequently four and sometimes five strong horses in a plough, and plough as deep as the plough and the strength of the horses, will admit. Mr. Arthur Young, by attending particularly to the depth of ploughing in various

towns in England found that the average depth in sandy soils was four inches, in loamy soils four and three quarters, and in clayey soils, three and a half. In Loudoun, we plough much deeper; sometimes not less than ten or eleven inches. Great regard is paid to the situation of the land by our best farmers; they never plough when the land is so wet that it will not easily crumble; because the principal design of ploughing, is to break the cohesion of the soil; and if in ploughing you turn over a wet mass, the ploughing can be of no advantage, as the soil becomes no lighter or looser by it; but rather heavier and more compact. Regard is also had to the shape of the land, by ploughing the hills horizontally, and making the furrows as nearly parallel to the base as possible. Owing to this mode of ploughing, it is rarely that you now meet with a gully.

Q. 12. At what time of the year is the land broke up deep?

A. We plough deep for all kinds of crops. For corn and oats we break up our land early in the spring or late in the fall. When the land is broke up for corn in the fall we often plough it in the spring and cross running a heavy harrow over it, either lay it off from three and a half to four feet each way, or in drills from five to eight feet wide, and plant the corn from twelve to eighteen inches apart. The deep ploughings not only retains the moisture from rains and dews, and prevents gullies by absorbing the water, but buries the roots and seeds of the weeds so effectually as to require but little cultivation for the corn—a common light harrow run over the corn when it is about six inches high, and one ploughing with a hoe harrow or cultivator, will be sufficient. From such a system of cultivation I have, this year, made from a large field, more barrels to the acre, than it would have produced bushels of corn, eight years ago, when I purchased it, and there has not been five cart-loads of manure on the field since it came into my possession.

Q. 13. What course of crops are generally pursued in Loudoun?

A. I believe the five years' rotation is the most common—that is; corn, wheat, clover, clover, wheat. The most productive and improving rotation in my opinion, is the six years' rotation—that is; corn, wheat, clover, clover, wheat, clover. By this rotation, one sixth of the plough land, will be in corn; one third in wheat and one half in clover every year; each field is to be cultivated in corn, once in every six years. The following is an illustration of the whole round of crops during 6 years.

Number of Years.	Number of Fields. 1	2	3	4	5	6
1	corn	clover	wheat	wheat	clover	clover
2	wheat	wheat	clover	clover	corn	clover
3	clover	clover	corn	clover	wheat	wheat
4	clover	corn	wheat	wheat	clover	clover
5	wheat	wheat	clover	clover	clover	corn
6	clover	clover	clover	corn	wheat	wheat

The corn when in the proper state for topping, to be cut down with a knife or hoe, and to be set up in rows as you would tops—the field is then broke up in lands from eight to ten feet wide, the wheat sowed on it and harrowed in: a part may be sown in rye or reserved for oats and flax in the spring.

Q. 14. Is wheat put in on clover lays or fallow, and which is considered the best method?

A. The clover lay answers very well where the land is clear, and well taken with clover, as it saves the expense of a cross ploughing. The seedsman follows the plough, and the harrow the seedsman. The clover lay is very common both with the red and the white clover—but requires the land to be very well taken with clover and no blue grass, or the crop will be greatly injured or entirely destroyed. I consider the crop more certain when the land is broke up from the 20th of June, to the 20th of July, and cross ploughed before seeding.

Q. 15. What was the state of the soil before the plaster and clover husbandry were applied?

A. The land, which was not originally of the first quality, was worn out by long cultivation and bad systems. Some of the most productive farms at this day, were sold very low by their owners, who could not support their families on them. Land that produced not more than five bushels of wheat and two barrels of corn to the acre, before the introduction of the plaster and clover system, will now yield from forty to fifty bushels of wheat, and from ten to fifteen barrels of corn, to the acre.

Q. 16. What is the growth of the forest and wood land?

A. The usual growth, is white oak, black oak, red oak, and hickory, with a mixture of poplar, locust, and some little walnut, when the land is of the first quality.

Q. 17. What are the effects of plaster on tobacco?

A. The effects of plaster on tobacco are greater, in my opinion, than on clover; and I am well satisfied, there is but little clover land in this county, that would not produce good tobacco, with the assistance of plaster. My first experiment with plaster, was on tobacco, about 20 years ago. My father gave me an estate, on which wheat, corn and tobacco, had been cultivated for many years. The overseer had a few acres in tobacco, at the time I took possession, one half was wed out before harvest; the crab grass had taken entire possession of the other half, before we could spare labour from the harvest field, to weed it out. The tobacco last wed had a yellow, sickly appearance, while the other part was in a flourishing condition. I caused a small quantity of plaster (say the half of a table spoonful,) to be dashed on each plant of tobacco last wed. The plaster acted like magic—the tobacco revived in a few days and in a few weeks, was equal to the other, and finally surpassed it. I invited several of my friends to view it, who could perceive the difference at more than one hundred yards distance. The next year, I caused a piece of ground, that had been in cultivation for many years, to be prepared for tobacco. This land had been of the very first quality, but reduced by our old system of cultivation. The tobacco was planted in good season, without one shovel full of manure, and after the first hoeing or weeding it was planted after the manner before described. The growth was uncommonly great, beyond my most sanguine expectations. It was believed by judges that every two plants would have made a pound. This was my last experiment with tobacco, as I have not cultivated the plant since. A very intelligent neighbour of mine made some experiments at the same time, and on the year following—the result of his experiments were the same with mine. From these experiments, I would recommend to you the following system, and will vouch for its success. Take four lots of land, each equal to the number of acres, you wish to cultivate in tobacco, and observe the following rotation. Tobacco, wheat, clover, clover. By this rotation, one fourth will be in tobacco, one fourth in wheat, and one half in clover.

The following is an illustration of the whole round of tobacco crop for 4 years.

Number of years	Number of Lots. 1	2	3	4
1	tobacco	wheat	clover	clover
2	wheat	clover	clover	tobacco
3	clover	clover	tobacco	wheat
4	clover	tobacco	wheat	clover

The clover field in course, to be cultivated in tobacco, should be broke up deep, late in the fall, and during the dry and frozen weather, all the stock should be fed on it. By pursuing such a system as this, I feel confident, you have no land, that cannot be reclaimed so as to produce more tobacco at the end of one rotation, than it did in its original state.

Q. 18. What kind of plough is most used in Loudoun?

A. The most approved plough, is one made in this village, by a Mr. McKinzie; it has an arched or crooked beam to prevent its choaking in clover or foul land; the mouldboard is much upon the principle of the Jefferson mouldboard, as are the Peacock, Chenoweth, and Freeborn patent ploughs. We have several very good plough makers in this county, all of whom use cast iron mouldboards made from their own patterns. The Freeborn plough of New York is highly recommended, and will suit your land. It can be had in any of the seaport towns.

Q. 19. What kind of harrows used?

A. There has been but little improvement on the harrow—the square harrow is the most common. Each farmer has two or more harrows—light or heavy, to suit the ground or purposes for which they are used.

I have endeavoured in a hasty manner to answer your inquiries on the subject of Loudoun Husbandry. Should I not have been sufficiently explicit, or should you or the Society, of which you are so zealous a member, wish further information, it will give me great pleasure to impart any knowledge, I may have gained, from my own experience or the experience of my neighbours.

I am with sentiments of
great respect, yours,
WILLIAM NOLAND.

George W. Geffreys, Esq.

FOR THE AMERICAN FARMER.

THE *PROFESSION* OF

A Planter or Farmer.---No. 2.

The employment and consumption of the productions of our lands, directly and indirectly, is a branch of knowledge not only of great intrinsic importance, but one which enters largely into the plan of making *the profession* of a planter or farmer, regular, systematic, respectable and beneficial. France, for example, by her science and skill in a very nice branch, exceeds all the countries of the earth in *the fabrication of brandies and wines* from her noble and abundant grape. The islands of Antigua and Jamaica are distinguished for the flavour of their cane spirit and the knowledge, sense and spirit of the first class of their planters. Hydraulic art and science has no where been so accurately understood and practised in the irrigation or watering of artificial meadows, as in the continental dominions of the king of Sardinia and the contguious Milanese in upper Italy, which is the foundation of the finest and most considerable manufacture of cheese in the world, though it is a country warm enough to produce rice. Some of the planters in the French and Spanish West India Islands refine and whiten their sugars with great familiarity and success. Respectable planters and farmers, in the United States, have established superior mills to manufacture their own and their neighbouring crops into flour, their forests into boards, plank, and scantling, to free their cotton wool from its seed, and to manufacture oil of vegetable productions. The loom has been introduced into the families of the cultivators of the south in much greater numbers than in those of the northern and central grand divisions of the United States.* The most important articles of our present productions have been introduced into our country from abroad, or extended from former insignificance into great modern importance by ingenuity, reflection, enterprise and perseverance. Among these are indigo,† rice, cotton and sugar, and the vine and the olive promise, at no distant period, valuable additions. Every man of education and reading among our planters and farmers is called to study the interior and the practice of foreign countries, distinguished for the abundance and preparation of their crops, the uses they make of them, and the forms into which they convert them. *Arthur Young's* travels in France, Savoy, and Piedmont, and his accounts of the agriculture of Lincolnshire and other counties of Great Britain are as well worthy of the study of the planter and farmer, as Burrough's Law Reports and Cullen's first lines of medicine are deserving of the perusal of the lawyer and physician. Indeed they merit greater consideration, for *facts* do not vary in like soils and climates, but *doctrines* in law and medicine have many times their day. Ellenborough did not always agree with Mansfield, nor Marshall with Ellsworth. The horse, the ox, the sheep, and the hog, and indeed all the subjects of the animal department of natural history which are bred on our farms, except the turkey, and perhaps occasionally the goose and the duck, are from foreign countries. So all the bread grains except Indian corn; also sugar, cotton, rice, indigo, the fig, and nearly all our principal objects of culture are of foreign origin, but tobacco and the potato. It was computed in 1789, that our consumption of sugar was seventeen millions of pounds, and the French and British both had thoughts, before the happy invigoration of our *Union*, in that auspicious year, of making us take our supplies of sugar from Bordeaux, London, and Bristol. But we made in 1819 thirty millions of pounds of sugar of *the cane*, consuming now more of all kinds, little less than sixty millions, including the various syrups and treacles. A farming, planting, and horticultural collection of books should adorn and will enrich every cultivator's mansion, every rural town and village. Alphabetical works, or dictionaries of culture, and every other art and general science are peculiarly convenient to the active pursuers of agriculture, who often cannot spare long portions of the busy times and seasons for the regular perusal of the most compact volume, but can only use well digested and sound *books of reference.* The principles, by means of which every art, and every operation in an art, are actually and effectually and best executed may be learned by the relative portion of a well prepared Cyclopædia, or Farmer's Dictionary.‡ *An intimacy* with a few such works during the five years preceding the time of lawful age, is alone enough to make a respectable man, of good expections, out of a raw and simple youth of sixteen years. The human mind is as susceptible of being trained, quickened, strengthened and led to a right end in the great business of *the planter or farmer* as in any other *profession* in the whole round of human life. Every thing is done, *with more than a single medium profit*, which is done by a skilful mind, added to mere animal strength. Education does not only form the "*common*" mind: it forms those minds also, which are uncommon. To be taught the habits of observation, examination, reflection, and to attend to causes, consequences, effects, and results, is to be a man of better sense, however good by nature was the mind. The farmer or planter must be *that man of his art—sud arte peritus*—as well as his neighbours in other professions. Affected by the seasons and weather, he must be a steady, careful, and judicious observer of them. The cold nips his productions in the germ and bud: the heat prevents their succulent nourishment: the wet occasions injurious fermentations, or retards maturity till the season is lost. The instructed and experienced farmer best applies the proper means of prevention, preservation, and cure, which the various trials of the day require from his vigilance and versatility. Warned and empowered *by knowledge*, he saves by the ability to act instantly with intelligence, while a half bred farmer loses the quality or quantity of his crop from delay to consider or inquire. From the moment when an able cultivator sets apart his fields for the several purposes of the year, till his crops are delivered to the purchasers, he is engaged in a round of observation, care, management, and an acquaintance with his profession by a regular and well governed education, must give him an incalculable advantage over an industrious but untutored neighbour in the quantity, quality, and value of his crop.

CINCINNATUS.

* Looms returned by the Marshals in A.D. 1810.

Maine,	16,037	Ohio,	10,856
Massachusetts,	22,564	Georgia,	13,290
New Hampshire,	20,970	East Tennessee,	6,963
Vermont,	14,801	West do.	10,353
Rhode Island,	4,623	Orleans Territory,	993
Connecticut,	16,132	Mississippi do.	1,330
New York,	33,068	Louisiana do.	601
New Jersey,	4,648	Indiana do.	1,256
Pennsylvania,	17,577	Illinois do.	460
Delaware,	2,005	Michigan do.	17
Maryland,	6,388	Columbia District,	110
Virginia,	40,856		
N. Carolina,	40,978		325,392
S. Carolina,	14,938		

† Indigo has been nearly excluded from the list of our exports by the chymical skills, aids and care of the planters of Hindoostan. Our planters should study the relative science, improve the art and regain the branch. The science would be equally useful and ornamental to the profession of the cultivators. The conductors of the indigo makers of British India are persons from the United Kingdom of Great Britain and Ireland, climes in which the indigo plant and its culture are unseen and impracticable.

‡ Miller's Gardener's Dictionary—*Eng:* and *Rozier, Chaptal* and Co. *French* agriculture are fine examples,—also *Rees.*

Palma Christi.

In compliance with the request of one of our subscribers, we offer some facts and remarks on the culture and uses of Palma Christi.

"Though this mild family purgative is produced in quantities in some of the islands in the West Indies, yet it is sometimes hardly to be got in the shops in the United States, or is very stale. It is produced from the seeds of the *Palma Christi* plant, common in our gardens. There are two sorts in this country; but that which has been long known, is the most, common, has a *light or bluish coloured stalk*, is the sort used in the West Indies, as I am assured by a respectable family from thence, who add, that the Palma Christi having a *reddish stalk*, is never used, it being suspected of having harsh if not poisonous qualities. Further they say, that of the two modes of procuring the oil, that by *expression* is preferred.—Yet *Labat* and others prefer *boiling* the seeds. The reddish sort was but lately introduced as a curiosity in a garden near Philadelphia.

"Strip the nuts of their husks. Boil them in water; and as the oil rises skim it off. When it yields no more to the water, press the grounds, wrapped loosely in a coarse cloth. This oil is sweet, without bad taste or smell, and as clear as olive oil." *P. Labat.* Bruise the seeds, and boil them. The oil skimmed off is much purer, and is capable of being kept longer than what is obtained by *expression;* because the *water detains the mucilage*, which is in a large quantity in the expressed oil, and which disposes it to spoil sooner. Edinb. Dispens. An. 1794.

Dr. *Simmons* says of *Palma-christi* and its oil, in Dr. *Wright's* book of Medical Plants in Jamaica, that when the bunches begin to turn black, they are gathered, dried in the sun, and the seeds picked out and put up for use: that the best preparation of it is thus: a large iron pot is half filled with water; the nuts being beat in parcels, in deep wooden mortars, are then thrown into the pot, and gently boiled two hours under constant *stirring*. The oil then swims mixed with a white froth, and is skimmed off till no more rises. The skimmings are heated in a small iron pot, and strained through a cloth. When cold it is bottled up. *Thus made*, it is clear and well flavoured. An English gallon of seeds may yield two pounds of oil, which is a large proportion. In lamps it burns clear, and has no offensive smell. It answers all the purposes of the painter, and for ointments and plasters. It purges without stimulus, and is given to infants to purge off meconium. All oils are noxious to insects; and the castor oil kills and expels them.—It it given as a purge, after using the cabbage-bark some days. It is remarkably successful in constipation and belly-ache; sits well on the stomach; allays the spasm, and produces plentiful evacuation, especially if at the same time fomentations or warm bath are used."

The above is copied from Boardley's Husbandry. It must be recollected, that many years have elapsed since that work was published, and that the manufacture of Castor Oil in these United States is still in its infancy,—also, that the oil is a medicine of no antiquity. So scarce was good Caster Oil in Dr. Cullen's time, that he supposed it almost inadmissable to a delicate female stomach. Time and experience have improved our knowledge of the article—we shall here detail what we know, but must leave apart (the most desirable perhaps to our inquiring correspondent) to be filled up by some of the cultivators of the Ricinus. We are informed that it is cultivated in Jersey, and invite a communication from some of the most experienced cultivators in that state.

There are several species of the Ricinus. The R. *communis* is the species used in medicine. The red and the blue stalked mentioned by Mr. Boardley are probably no more than varieties; having the same leaf. Nevertheless the red is to be rejected, because it has an inherent acrimony to the palate, so that it appears the instant it is expressed like old oil. As to its being poisonous, it is no more so than the blue; for the shell of *the seed* of either will operate with alarming violence, both as emetic and cathartic,—and it is but a few days since that a family in Baltimore experienced their violence from eating about half a dozen seeds. From this locality of the active part it is more than probable that if the shell was separated before expression, or boiling, that a bland oil would be produced of little or no medicinal properties, (i. e. purgative.) It is equally probable, that in times of great scarcity of the article, that the shells left after expression, (oil cake) would impregnate a quantity of sweet oil (oil olive) with the medicinal quality. Much dispute has existed as to the best method of prepairing the Castor Oil; some preferring the boiled, and others the expressed. If the two preparations are nicely conducted there can be no difference in the medicinal excellence. The boiled may be burned by continuing the process too long, and we believe that the plates of oil mills may be heated so as to produce an empyrheumatic flavour. But with the boiled, a portion of water may be left, and if bottled in that condition and sent abroad, especially in hot climates, this water will become bilge water by the oil absorbing the oxygen, and the oil will be intolerable for a long time, but will at length lose this ill flavour by the escape of the hydrogen through the pours of the cork. This was a secret known only to a few druggists. The expressed oil comes off with some pumice, and remains hazy without any disposition to settle and from this circumstance it was objectionable. Not keeping so well, and containing some of the more active particles, it was said to be more apt to puke though quite flavourless. But the manufacturers now send it clear and fine, and it is generally preferred and universally prepared by expression in these United States. What methods the manufacturers use to clarify it we know not, but hope that no lead or pewter is used, which is sometimes done in the West Indies. A flannel of proper fineness made into a conical bag (Hyprocrates sleive) as used for jelly will do the business, though slowly,—and there can be no doubt but that it may be extracted by boiling and scumming the oil rising and the pumice mixing with the water. The best imported oil comes from Jamaica, Nevis and St. Kitts. Dr. Simmons' method is pursued in this latter place, from information direct from the place, and it is mostly prepared there by the blacks. The oil from St. Domingo is generally indifferent or bad, having the bilge water on it. It is made near Calcutta in quantity and sold for little more than the value of the jar that contains it, say 75 cts. for three gallons, but it is not good and is generally very thin and hazy. A gentleman from the West Indies informed us that Castor Oil of 7 or 10 years sold very high in some of the islands, but for why he could not tell;—perhaps if then well flavoured it was a mark of great purity.

A Mr. W. Stabler, of Montgomery, was the first person who raised the Ricinus, and made Castor Oil in this state, and from him we learned that about $80 worth was made on a quarter of an acre.—We believe it is still made in that neighbourhood. One of the greatest difficulties is the successive gathering the bunches, which by a provision of nature discharge the seed as they get ripe with an elastic force, which makes it necessary to cut them without waiting for the rest to ripen.

The nuts will take sometime to come up, but we have seen them up early in April against a wall highly manured. If no person will come forward and say the time of sowing, the distance, &c. then we say sow 1st of April in very rich drills, the length of the plant distant, or 6 or 7 feet, and place the plants their width in the drills, say 3 1-2 feet, put the seed 2 inches deep, and keep the ground very clean in the early growth of the plant.

TO THE EDITOR OF THE AMERICAN FARMER.

Chester Town, 13th May, 1820.

SIR—The letters which have appeared in your paper, respecting the Italian Clover,* or "trifolium incarnatum," induce me to send you some remarks of my own, having seen it, in its full growth in Italy, in the spring of 1818; and cultivated here since, as well as a bad state of health would permit. In making one of the usual excursions from Naples, my attention was arrested by the sight of a small field of this clover, exhibiting a fine, compact crop, with long blossoms of the most sparkling scarlet, and at least three feet in height. Its great superiority in growth and beauty, to any kind of clover I had ever seen, immediately determined me to endeavour to obtain information respecting it, and some seed. On inquiry I was told, that it was much preferred to the kind we commonly call here English clover, and that the seed was as large as the size of cannon powder.—After much trouble, I succeeded in procuring a small quantity of seed in the chaff, and on my return home, sowed some in the fall for experiment, to ascertain whether our winters would prove too severe for it, or materially affect it. I found that it would very well survive the winter.—Last spring, I sowed my whole parcel of seed, not more I suppose than a tea cup full, after distributing some among my friends; but it not occurring to me, that it might be an annual plant, I was mortified to find it all dead, in the latter part of the summer, and was then inclined to attribute my loss to excessive drought, which prevailed. This I view as a considerable objection to the cultivation of it in the United States, except to the southward; and though our winters do not kill it, its growth is checked, and it remains in a suffering state, for the space of four or five months. In Italy, it has the advantage of an uninterrupted growth from the time of sowing. I fear it cannot be raised here to a greater height than two feet, and I very much lament its being an annual plant, as appears from the information of Doct. Mitchell; but I shall persevere in making further experiments with it. My friend Doctor Anderson, has raise it much finer than myself, and deserves great credit for his attention in cultivating it. On the whole, at present I am compelled to think it very like many of the machines, we have for threshing wheat, which however pretty, have the fatal defect of not being able to go.

I am respectfully,
Your ob't. serv't, &c.
B. HANDS.

* The Italian name I received, was "Erba," which I was not satisfied with, but could get no other.

FROM THE PLOUGH BOY.

Flemish Husbandry.---No. 2.

SIR,—I shall now, as promised, give some details, respecting the Flemish mode of cultivation.

1. *Manure.*

A Fleming spares no cost† nor labour to obtain this

† It is within my knowledge, (says Vanderstraeten) that villages of 6000 acres of surface expend, in the purchase of dung and other manures, more than 26,000*l.* sterling, besides the enormous quantity of dung from their own cattle. This expense is immense, but it is returned with the greatest usury.

necessary article. What his domestic arrangements do not produce, he supplies in the neighbouring towns and villages; but it is chiefly upon his cattle that he relies. Of these he rears an immense number; five times more, in proportion, than is done by the English farmer, by which he obtains at least triple the quantity of dung. He is equally careful to preserve the *liquid* portions of this manure, which contain the greatest proportion of fertilizing juices. For that purpose, the stalls and stables where the cattle are kept, are paved with a cement impervious to water; a precaution by which no part of the urine of the animals is lost; while dung pits to which there is a communication by little channels from the cattle stalls and privies, are formed and lined with the same cement, to receive this valuable deposit. This liquid manure is commonly reserved to enrich the ground during the second and third year's cropping, an abundance of the more solid manure having been spread the first year of the course.

Nor is the Flemish farmer indifferent to the conversion of weeds, waste straw, and other vegetable matter into manure. These he collects, and disposes in such a manner as to produce fermentation, by which the whole mass is decomposed and converted into a fertilizing substance.

II. *Digging.*

Under this head I shall content myself with the following quotations from Vanderstraeten's survey.

"In Flanders, before the introduction of the operation of digging, few lands, or rather none, had a stratum of vegetable mould of eighteen inches deep. It is art and industry which have created this. The greater part of her beautiful fields were then only moving sands, or soils even still more ungrateful. Observe then the methods which were used to raise them to their great fertility. In the beginning they were dug to a smaller depth, and upon the moving sands was spread a great quantity of dung, of which the grosser parts, as well as the straw, which was mixed with them, were decomposed into fertile soil. It was the same with the grain and stubble left by the crops, with the noxious weeds and roots. All those vegetable remains began to give fertility and consistence to the sands; and in proportion to the fertility and consistence which the soil acquired, the spade was pushed to a greater depth. The sand, of which the spade increased the vegetable stratum, was already no longer barren, because it was enriched with the juices of the dung, which the rain had carried below the depth to which the spade had not yet reached. The abundance of dung and the annual supply of vegetable matter, changed, in the end, this moving sand into the blackest mould, which can possibly be seen in some places of a depth of eighteen inches, and in others of two feet!

"The methods taken with the other soils, more ungrateful still, were nearly the same. The amelioration which the Flemish agriculture produces in soils almost sterile, is annually visible; but, in all cases, the greatest possible degree of fertility can only be the work of time.—This amelioration, however, may be produced very rapidly in soils which have, at their commencement only four inches of vegetable mould, and which repose on a stratum of good earth, though rendered as hard as a rock by the ploughshare. A similar low stratum existed in Flanders, before the introduction of digging.

"Periodically, every three, four, or seven years, the spade, in Flanders, raises upon the surface a stratum of earth, which, under the stratum that has produced the crops, has enjoyed a fallow of three, four, or seven years, and, in consequence, has yielded no crop itself; a stratum already fertilized in some degree, by the decomposition of the weeds which grow upon it till the moment when it was buried, and enriched with the salts of the dung, caused by the rains to filtrate, during the interval, through the upper stratum. This stratum may, therefore, in consequence, be regarded as a virgin earth, possessing the most extreme degree of fertility, through the manure it has received, and to which more is now to be added.

"The operation of digging, especially in light soils, is performed with great rapidity. A good workman can dig in the space of a day, the twenty fifth part of an acre, to the depth of eighteen inches at one stroke of the spade. He thus buries the upper layer, and brings to the surface the lower layer, which has produced no crop for three or for seven years, nor the same crop for six or for fourteen."

I shall embrace the earliest opportunity of resuming this interesting subject.

Yours respectfully,
GEO. HOUSTON.

New York, May 1, 1820.

FOR THE AMERICAN FARMER.

To prevent Bees being destroyed by the Worm.

Set each corner of the hive on a piece of wood about an inch square and a quarter of an inch in thickness,—this elevates the hive a little and prevents the deposits of the eggs which produce the worm, and which are always placed where the edges of the hive come in contact with the bench.

TO CALCULATE INTEREST.

Having frequently seen many an honest unsuspecting farmer the dupe of merchants and deputy-sheriffs in calculating interest, I have given a very short and simple method of calculating it at six per cent. per annum.

Rule.—Multiply the principal by half the number of months.

Ex. What is the interest of forty dollars for twelve months?

40 the principal.
6 half the number of months

$2 40 Answer,

Ex. What is the interest of forty dollars for seven months?

40
3½

1, 20
20

$1, 40 Answer.

Ex. What is the interest of forty dollars for one month?

40
½

0 20 Answer.

From Poulson's American Daily Advertiser.

THE GREEN HOUSE.

Summer's soft breeze had ceas'd to blow,
And earth was mantled o'er with snow.
A lady led me to a bower,
Where many a beauteous bud and flower,
That opening, *this* in fullest bloom,
Flourish'd in spite of winter's gloom.
Here foster'd by her gentle hand,
Grew fruits of many a distant land;
The lemon and the orange trees,
And plants from shores of Indian seas,
This bower was fragant as the gale,
Where sweet Arabia's flowers exhale.

Perfumeless quite should be the flower,
That would not flourish in this bower;
Quite tasteless too the fruit should be;
And leafless the ungallant tree,
That would not proudly bloom and bear,
If nourish'd by this lady's care.
Sweet Green House, pleasant were the hours,
I loitur'd 'midst your fragant flowers.
The forest had its foliage shed;
The field and garden plants were dead;
Nature had sunk in frosty tomb—
Yet dared within thy walls to bloom.
Summer was gone—'twas winter drear—
Still summer's charms were blooming here.

An emblem in this scene we find,
Of pious soul and cultur'd mind;
Of one who in his early youth,
Wisely prefers the paths of truth;
Improves the morning of his days,
By virtuous steps in wisdom's ways.
Life's Spring and Summer fleet away—
Life's Winter comes with sure decay.
His head with age is frosted o'er,
Life's morning joys are his no more,
Yet finds he sweet and tranquil rest—
He has a Green House in his breast.
Thus bloom the flowers of love and truth;
Thus live the scenes of blissful youth;
Thus knowledge dwells in genial clime,
Uninjur'd by the hand of time. BARTON.

Present Prices of Country Produce in this Market.

Actual sales of WHEAT—WHITE, $1 5 to $1 10—RED, $1 to $1 3—CORN, 43 to 46 cts.—RYE, 56 cts.—OATS, 33 to 35 cts.—HAY, per ton $17—STRAW, do. $11 to $12—POTATOES, 75 cts.—FLOUR, from the wagons, $4 75—WHISKEY, from do. 33 cts.—BUTTER, 31 cts.—EGGS, 12½ cts.—Green PEAS, per bushel, $3—LAMB, per quarter, 50 to 75 cts.—VEAL, 6 to 8 cts.—BEEF, prime pieces, 10 cts.—Live CATTLE, $6 50 to $7. Best London WHITE LEAD, ground in oil, $17—Do. dry, $14 50—Boiled OIL, $1 25—Virginia TOBACCO, a few hhds. old crop, sold the last week, for $7 50, new crop, $6 75—Maryland TOBACCO, Calvert county, unfired, a few hhds. at $11 50—Wagon TOBACCO, selling from $9 to 18, according to quality—North Carolina Produce, same as last report.

AT THE OLD STAND.

M'ELDERRY'S WHARF,

Wm. Bromwell, Jr.

Has for sale very low for Cash,

Wm. Kirk's Patent Threshing Machine, to work by hand.
J. Bromwell's Patent Self-Feeding Wheat Fan, much esteemed by those who have used it.
Newly invented Machine for cutting Straw, Ruta Baga or other vegetables.
Patent and Common Straw Boxes.
Common Wheat Fans.
Wire Safes and Sieves assorted—*Also,*
SMITH'S BELLOWS—and
Wove Wire, all sizes
And wire wove to order on the shortest notice.
May, 19, 1820.

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Having entered into Co-partnership, under the Firm of

HARISON & TORREY,

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A complete assortment of the most approved Machines and implements in AGRICULTURE, and have made arrangements to receive the newest Improvements in that line.
Orders from any part of the United States, for Agricultural Machines immediately attended to.—Catalogues with prices may be had at the store.

R. N. HARISON,
WM. TORREY, JUN.

New York, May 13, 1820.